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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,648	02/19/2004	Kelly Libby	2331-001	2184
27522 7590 08/07/2007 SEAN W. GOODWIN 222 PARKSIDE PLACE 602-12 AVENUE S.W. CALGARY, AB T2R 1J3 CANADA			EXAMINER LUKS, JEREMY AUSTIN	
			ART UNIT 2837	PAPER NUMBER
			MAIL DATE 08/07/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/780,648

Applicant(s)

LIBBY, KELLY

Examiner

Jeremy Luks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasper (4,222,456) in view of Clark (2,828,830).

With respect to Claims 1-4, 7-10, 15-17 and 19, Kasper teaches an anti-reversionary device (Figure 1) adapted to a conduit (18) having a bore through which gas flow to or from an internal combustion engine (Figure 3, #40), comprising: an inner pipe (10) positioned substantially concentrically and co-axially within the bore of the conduit (10), for forming a tubular gas inlet (near #12) having a diameter smaller than a diameter of the conduit (18) for passage of a central portion of the gas flow (60) through and an annular portion of the gas flow (62) thereabout; and an annular positioning elements (47 – Note that the Specification incorrectly references #46 as the positioning elements, however, #46 is clearly directed to the gas flow (Figure 1 and Col. 3, Line 61), and positioning elements #47 are clearly seen in Figures 1 and 2) extending to fit between the tubular inlet (near #12) and the conduit (18), the annular positioning elements (47) forming a plurality of ports (openings formed between individual elements #47, seen clearly in Figure 2) formed therein and, each port forming a passage directed radially inward and downstream therefrom (see passages in Figure 2); wherein the inner

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pipe (10) extends upstream from the annular positioning elements (47) (inlet end near #12 clearly extends upstream of elements #47), and the annular portion of the gas flow (62) having a flow rate slower than the central portion of the gas flow (60) (Col. 3, Line 61 – Col. 4, Line 7), is accelerated through the plurality of ports (spaces between elements #47) for directed discharge into the central gas flow (occurs at vanes #52) for combining substantially all of central (60) and annular (62) portions of substantially the entirety of the gas flow in the conduit (18) downstream from the annular positioning elements (47); wherein the conduit (18) is the exhaust from an internal combustion engine (Figure 3, #40) (Col. 3, Lines 26-35); wherein the anti-reversionary device (Figures 1 and 2) is fit adjacent the engine (Figure 3, #40); further comprising a cylindrical housing (inner surface of conduit 18 could be a cylindrical housing) adapted to fit to the bore of the conduit (18) wherein the annular positioning elements (47) extend between the cylindrical housing (inner surface or conduit #18) and inner pipe (10). Further, it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138. Kasper fails to teach where the annular positioning elements comprise an annular wall extending to fit between the tubular inlet and the conduit, the annular wall having a plurality of ports formed therein and, each port forming a passage directed radially inward and downstream therefrom; where the conduit is an intake to an internal combustion engine; wherein the annular wall is a truncated cone which is angled downstream from the inner pipe to the conduit. Official Notice is taken that it is well

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known in the art that silencing devices and methods in internal combustion engines are interchangeably used with respect to the intake and exhaust ends of the flow path.

Clark teaches an annular wall (Figure 1B, #6) extending to fit between a tubular inlet (inlet end of tube #3) and a conduit (1) when used in combination, the annular wall (6) having a plurality of ports (7) formed therein and, each port (7) forming a passage directed radially inward and downstream therefrom; wherein the annular wall (6) is a truncated cone which is angled downstream from the inner pipe (3) to the conduit (1) (see orientation of annular wall #6 in Figure 1B). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Kasper, with the apparatus of Clark to increase rigidity for supporting the inner tube, in addition to serving as a functional part of the muffler (i.e. perforations #7).

With respect to Claims 5-6, 13-14, 18 and 20, Kasper and Clask are relied upon for the reasons and disclosures set forth above. Kasper and Clask fail to teach wherein the passages are angled radially inward between 20 and 30 degrees. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to angle the passages radially inward between 20 and 30 degrees, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working range or value involves only routine skill in the art. In re Aller, 105 USPQ 233. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to Claims 11 and 12, Clark teaches wherein a housing (1), annular wall (6) and inner pipe (3) are formed from a sheet material (Col. 1, Lines 52-55), having a wall thickness, which forms the passage (7) through the annular wall (6). Further, the

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method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given little patentable weight. Further, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

In re Leshin, 125 USPQ 416.

Conclusion


2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinent arts of record relating to anti-reversion apparatus are disclosed in the PTO-892.

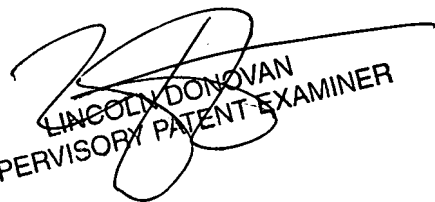
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy Luks whose telephone number is (571) 272-2707. The examiner can normally be reached on Monday-Thursday 8:30-6:00, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeremy Luks 
Patent Examiner
Art Unit 2837
Class 181


LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER